

Appendix F

Evaluating Benefits and Costs

1. Identification

Applying new technologies to existing procedures is seldom accomplished without cost. There is a growing belief in the judiciary, however, that a transition from paper to electronic documents offers great potential for service improvements and operational cost savings. Some would argue that the initiative to develop electronic case file systems will bring improvements in court operation and service that outweigh the attendant financial and other costs of the electronic systems. Although all anticipated benefits may not be realized immediately, it will be necessary to show over time that the assumption was correct.

2. Measurement

In many cases, transitions in technology have reduced existing costs or added benefits that outweigh the costs. Critical questions are, of course, What are the true costs? How to measure the improvements? In most service organizations -- and particularly in government -- the answers to these questions go beyond simple quantitative methods but are linked to the policy makers' perceptions of the core purposes of the organizations. A more telling question is, What level of expenditure balances costs with the level of service to the public has come to expect of the courts? Careful attention should therefore be given to identifying and documenting the benefits, costs, opportunities, and challenges of shifting away primary reliance on paper records.

Since service expectations are possibly infinite, and appropriations definitely finite, decisions about balancing levels of service with expenditures include both objective and subjective components. A comprehensive business case analysis must address the service mission of the courts, but within the reality of budgets.

This section of the report presents a discussion of a methodology for analyzing the benefits and costs related to applying new technology to case files. Discussions are based on the deliberations of court focus groups and selected interviews at existing prototype sites. For subsequent phase of this project, quantitative data for analysis should be collected from prototype sites and specialized research. The advantages of these new systems for judges, court staff, attorneys, and other users, and their long-term impact on judicial space requirements, personnel utilization, and other resource needs, should be studied and publicized.

[The following is a discussion of the kind of methodology might be required for a rigorous cost-benefit analysis.]

a. Costs

Costs are measured in terms of resources used: money, time, labor, space. For overall analysis, it is useful to convert all resource costs to dollar amounts. Translating resource usage into dollar cost (e.g., personnel cost, rent, cost per action), while useful for assessing total costs, may not always be feasible. Sunk costs (money already spent, as in capital expenditures) are not used.

There are three general types of costs: (1) present system or administrative costs, (2) transition costs to new procedures (e.g. training, acquisition, parallel operations), and (3) new system or administrative costs. Benefits are net amounts from “1 minus 3” or “1 minus the sum of 2 and 3.” There is also a time dimension to transition to new systems: How should start up or transition costs be considered compared to normal operating costs?

For identifying cost and benefits, the following categories may be examined:

1. Quantifiable or Directly Measurable

Most labor effort is measurable. The time used in carrying out specific tasks and activities may converted to costs using actual or average salaries. Costs are annual costs. Table 1, at the end of this section presents a list of potential tasks in case file administration.

Table 2 displays a method for deriving a composite salary and calculating proportional labor costs. In calculating labor costs, the following measures are acceptable sources:

- published pay scales
- budgeted amounts
- estimate based on at least 3 interviews
- comparison to same activity at another organization

Labor costs should also include fringe benefits. Most budget offices can supply a percentage multiplier that, when applied to direct labor costs, results in a true picture of labor costs. While actual expenses are preferable, estimates of costs are acceptable if the analyst documents the methods used to produce the estimate.

The cost of materials and equipment is also measurable. Table 3 presents a list of typically-used equipment and materials in case file administration.

If an electronic case file system is to be phased-in over a number of years, the analysis should include percentage estimates for the phase-in period (e.g., 1st year 25% implemented, second year 60% implemented, etc.). See Table 4 for a listing of transition cost categories.

2. Qualitative

Qualitative cost are difficult to measure but can be identified. It is likely the ECF project may involve costs that are not easily measurable in a non-trivial manner, such as:

- *Delayed access to files*
- *Cost to litigants*
 - Existing system
 - Transition to new system

b. Advantages, Savings, or Conveniences Offered by ECF

The costs may be specific to case administration or have a wider scope to include costs to litigants, the bar, and the public.

1. Quantifiable or Directly Measurable

The most apparent benefits relate directly to the purpose for developing new case file mechanisms: reduced cost as calculated in the previous section.. Obvious quantitative benefits to court operations are reductions in existing expense levels or in projected increases in cost. Note: there is a difference between “benefit” and “saving” -- not all benefits are cost savings. Additional functionality (being able to do more for the same cost) is a benefit.

2. Qualitative

Qualitative benefits are more difficult to measure but can be identified. It is likely the ECF project may involve benefits that are not easily measurable in a non-trivial manner, such as:

- *Faster access.* Analysts should attempt to identify qualitative benefits by including specifics about how or in what way “faster access” is a benefit.
- *Improved management.* These qualities might be measured as preferences or before-after opinion rating scales filled out by participants or focus groups.

“Cost avoidance” generally refers to an absence of future cost -- often a benefit of new systems. The concept can be misused when cost-benefit studies count as benefits projected costs that never would have been incurred. Future costs should not be understated, but at the same time be reasonably-expected future costs.

Table 1: Direct Labor
case opening
case docketing entries
forms preparation
filing of motions, orders, and other papers in the case file
scanning of documents
photocopying
scheduling
queries and retrievals
document review by clerk
error corrections
supplemental filing
report generation
archival procedures
system administration

Table 2: Calculating Average Salary			
Position	Average Annual Salary	% of time devoted to case file task	Case file cost component (col. 2 x col. 3)
Clerk of Court			
Chief Deputy			
Deputy Clerks			
System Administrator			
Calendaring Unit			
Motion Attorney			
etc.			
			Total:

Table 3: Additional Cost Elements
<i>Documents</i>
(See documents matrix)
<i>Space and Facilities</i>
file room
computer room
<i>Hardware/Software</i>
maintenance
depreciation
communication lines
network access
<i>Supplies</i>
postage
training

Table 4: Implementation /Transition Costs
Hardware purchase/depreciation maintenance
Software Development/Purchase
Labor Costs
Travel